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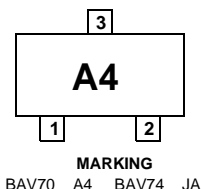
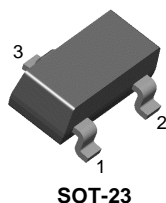
ON Semiconductor®

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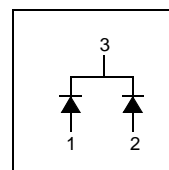
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BAV70 / 74



Connection Diagram



Small Signal Diode

Absolute Maximum Ratings * $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	BAV70 70 BAV74 50	V V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0 2.0	A A
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	150	$^\circ\text{C}$

* These ratings are limiting values above which the serviceability of the diode may be impaired.

NOTES:

- 1) These ratings are based on a maximum junction temperature of 150 degrees C.
- 2) These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	357	$^\circ\text{C/W}$

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Conditions	Min.	Max.	Units
V_R	Breakdown Voltage	BAV70 $I_R = 100\mu\text{A}$ BAV74 $I_R = 5.0\mu\text{A}$	75 50		V V
V_F	Forward Voltage	BAV70 $I_F = 1.0\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$ BAV74 $I_F = 100\text{mA}$		715 855 1.0 1.25 1.0	mV mV V V V
I_R	Reverse Leakage	BAV70 $V_R = 25\text{V}, T_A = 150^\circ\text{C}$ $V_R = 70\text{V}$ BAV74 $V_R = 70\text{V}, T_A = 150^\circ\text{C}$ $V_R = 50\text{V}$ $V_R = 50\text{V}, T_A = 150^\circ\text{C}$		60 5.0 100 100 100	μA μA μA nA μA
C_T	Total Capacitance	BAV70 $V_R = 0\text{V}, f = 1.0\text{MHz}$ BAV74 $V_R = 0\text{V}, f = 1.0\text{MHz}$		1.5 2.0	pF pF
t_{rr}	Reverse Recovery Time	BAV70 $I_F = I_R = 10\text{mA}, I_{RR} = 1.0\text{mA}, R_L = 100\Omega$ BAV74 $I_F = I_R = 10\text{mA}, I_{RR} = 1.0\text{mA}, R_L = 100\Omega$		6.0 4.0	ns ns

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